REMARKS

The applicants thank the Examiner for the careful examination of this application and respectfully request entry of the amendments indicated hereinabove.

Claims 1-7 are pending and rejected. The title and Claim 4 have been amended hereinabove.

Claim 1 positively recites the formation of a coating comprising a dopant over a surface of the semiconductor substrate. In addition, Claim 1 positively recites heating the semiconductor substrate to cause a portion of the dopant to diffuse from the coating into the semiconductor substrate. These advantageously claimed features are not taught or suggested by the patents granted to Lee ('337) or Lee ('640), either alone or in combination.

Lee ('337) teaches away from the advantageously claimed invention of diffusion from the coating because Lee ('337) specifically teaches the formation of the P-N junction by ion implantation (col. 2, lines 56-61). (The "coating" discussed in col. 2, lines 48-54 is a photoresist layer and not the solid source layer, e.g. "coating", described by the Applicants.)

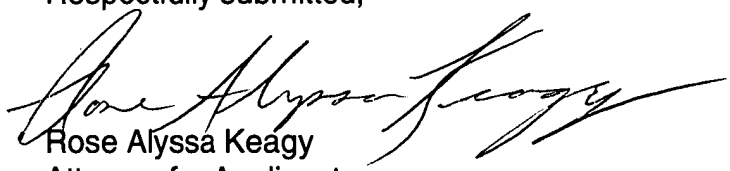
Lee ('640) also teaches away from the advantageously claimed invention of diffusion from the coating because Lee ('640) also specifically teaches the formation of the P-N junction by ion implantation (col. 3, lines 40-45). Lee ('640) further teaches away from the advantageously claimed invention because Lee ('640) uses heavy ions, such as Si, Ge,

As, (col. 6, lines 3-5) instead of the advantageously claimed "impurity atom is a faster diffusing species relative to silicon atoms" (last sub-paragraph of Applicant's claim 1).

Therefore, Claim 1 is patentable over Lee ('337) and Lee ('640), either alone or in combination. Furthermore, Claims 2 - 7 are allowable for depending on allowable independent Claim 1 and, in combination, including limitations not taught or described in the references of record.

For the reasons stated above, this application is believed to be in condition for allowance. Reexamination and reconsideration is requested.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFCATION:

Fabrication of Abrupt Ultra-Shallow Junctions From A Solid Source With Fluorine Implantation

IN THE CLAIMS:

4. The method of claim 1, wherein after heating 90% of that portion of the dopant that has diffused into the semiconductor substrate is located within about 50 nm [of the surface] from the surface of the semiconductor substrate.